

REPLACEMENT SHEET

FIG. 1A

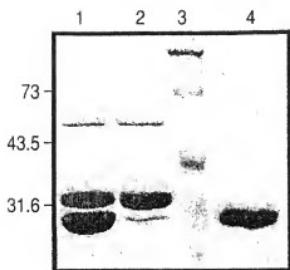


FIG. 1B

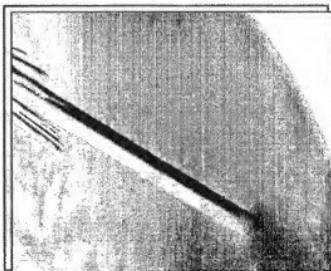
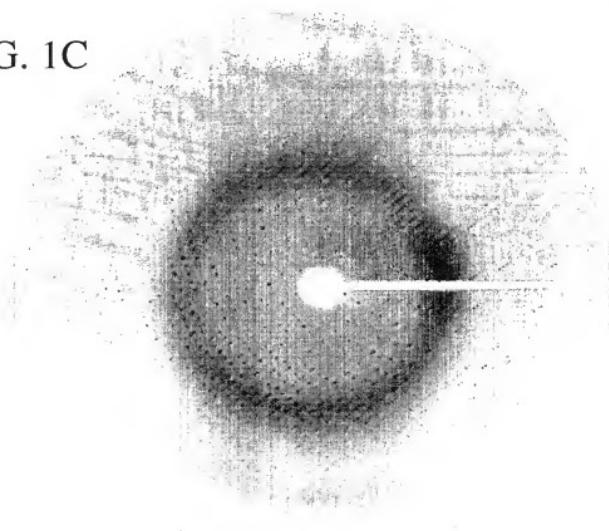


FIG. 1C



REPLACEMENT SHEET

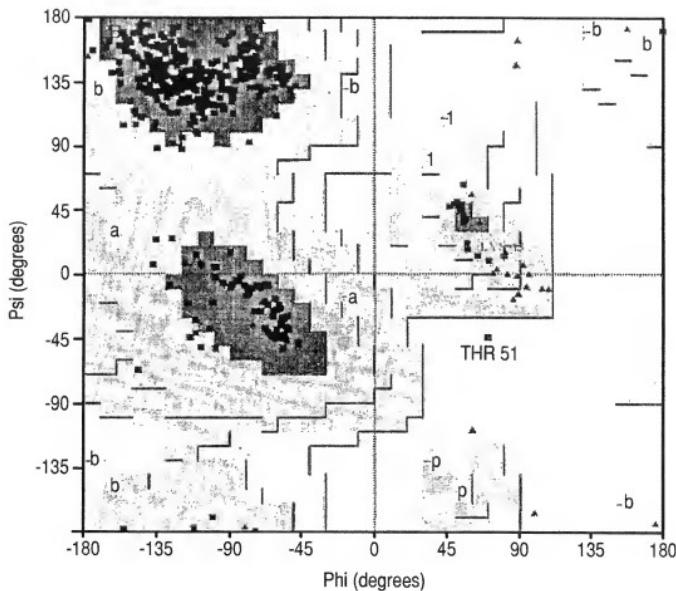


FIG. 1D

REPLACEMENT SHEET

FIG. 2B

FIG. 2A

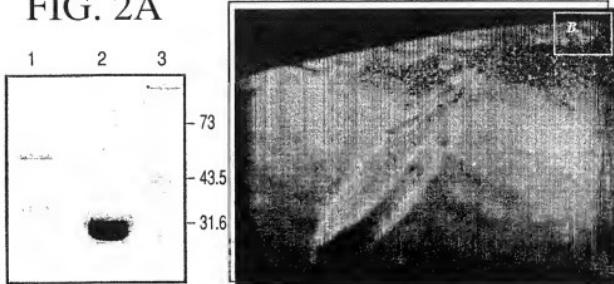
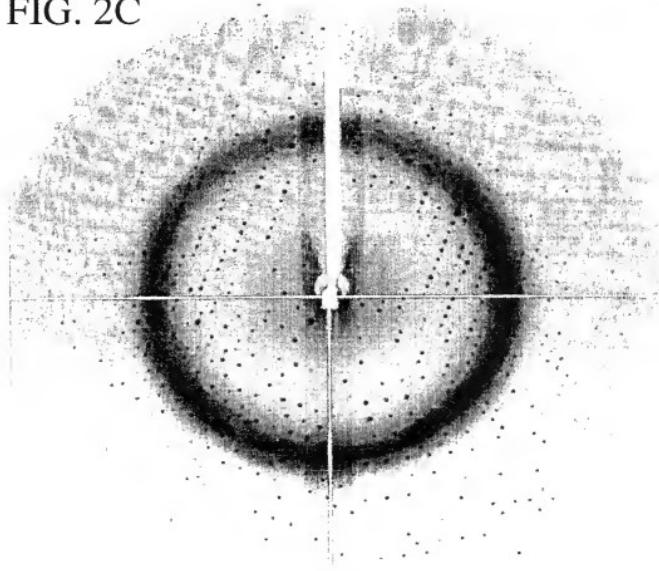


FIG. 2C



REPLACEMENT SHEET

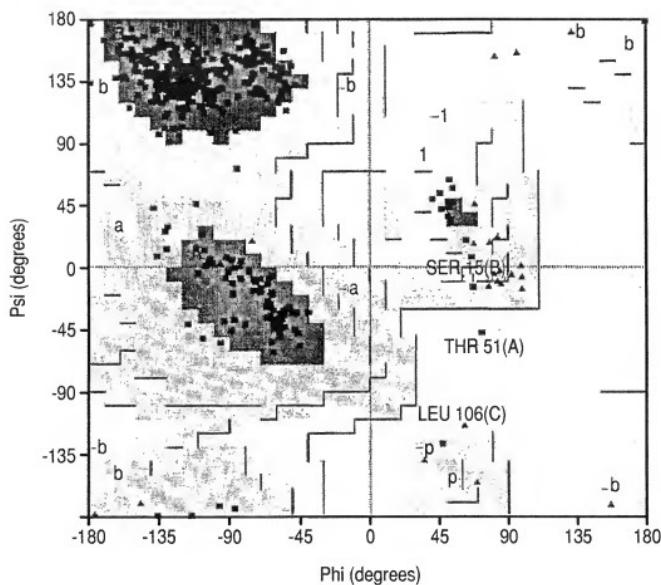


FIG. 2D

REPLACEMENT SHEET

FIG. 3A

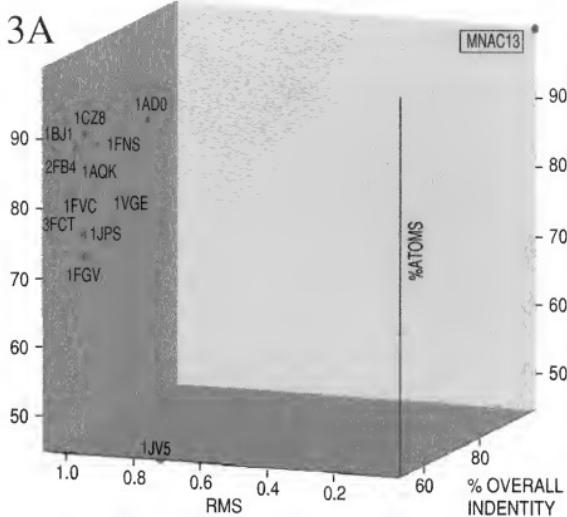
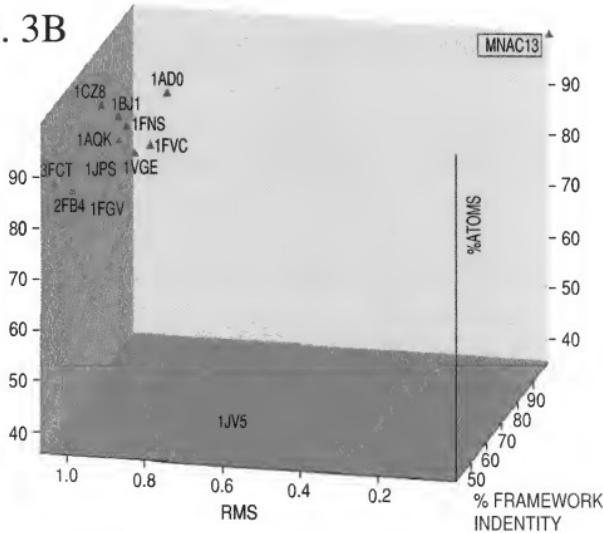


FIG. 3B



REPLACEMENT SHEET

FIG. 3C

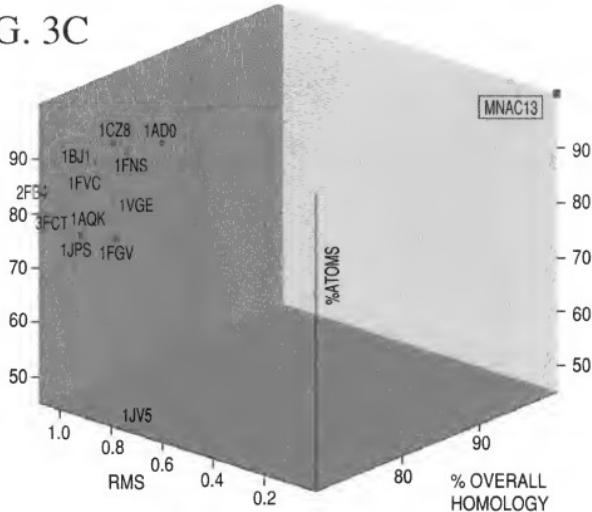
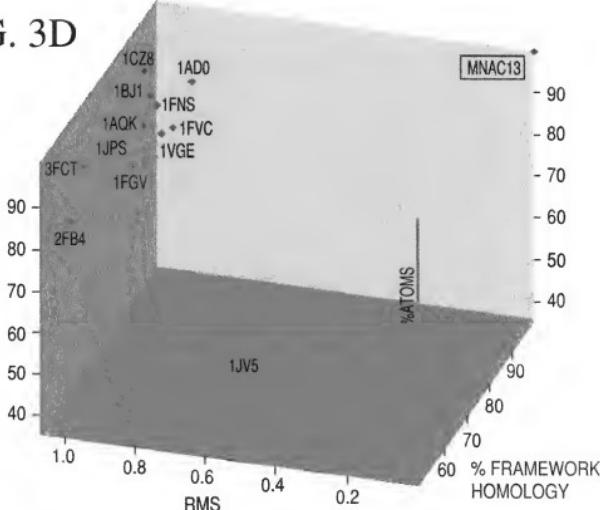


FIG. 3D



REPLACEMENT SHEET

Identity with MNAC13

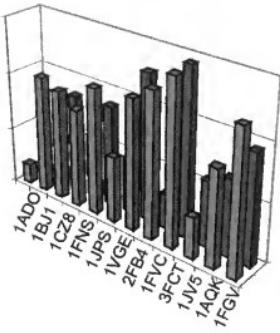


FIG. 3E

Homology with MNAC13

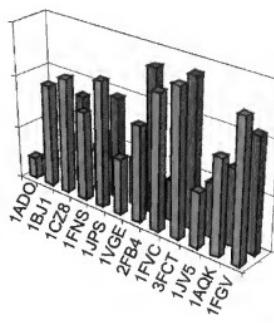


FIG. 3F

REPLACEMENT SHEET

FIG. 3G

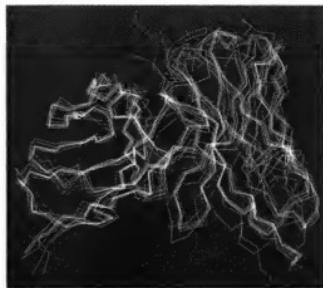


FIG. 3H



FIG. 3I

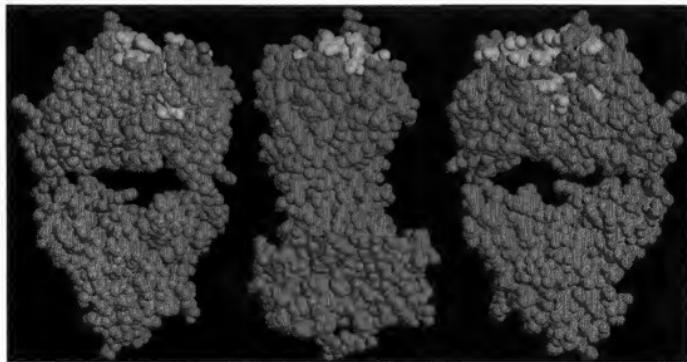


FIG. 3J

REPLACEMENT SHEET

FIG. 4A

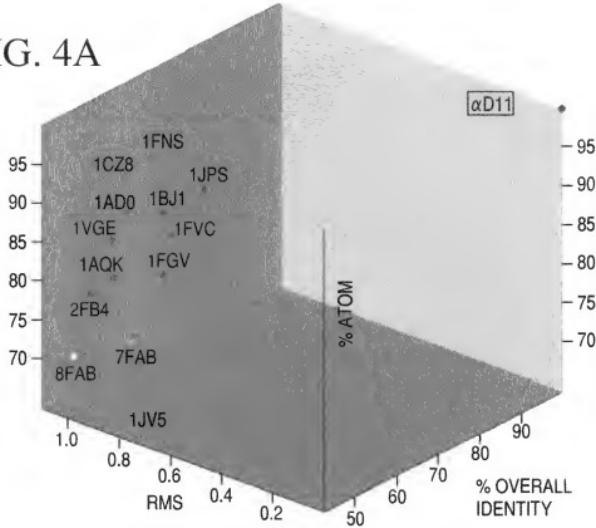
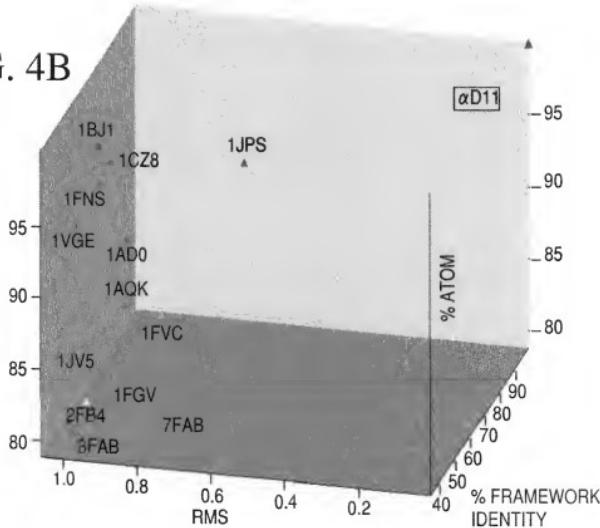


FIG. 4B



REPLACEMENT SHEET

FIG. 4C

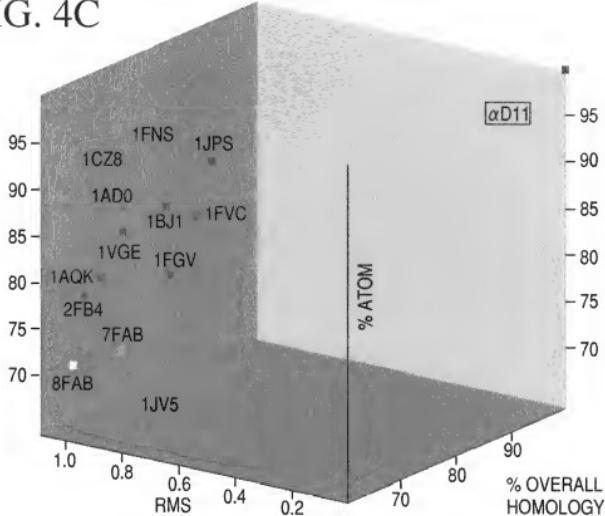
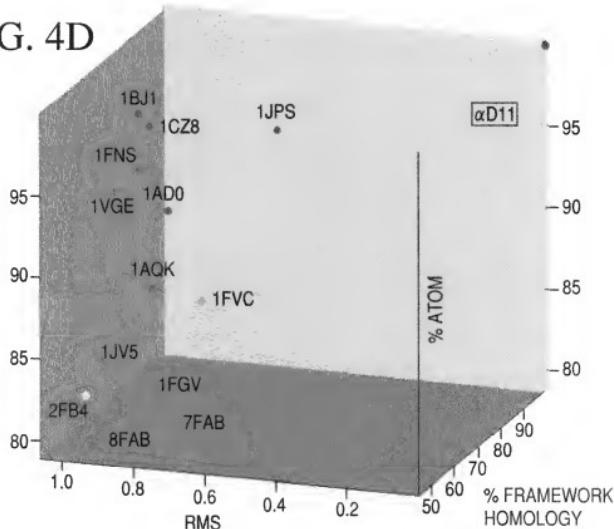


FIG. 4D



REPLACEMENT SHEET

Identity with α D11

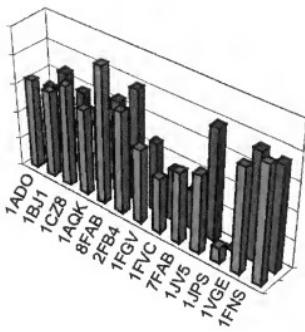


FIG. 4E

Homology with α D11

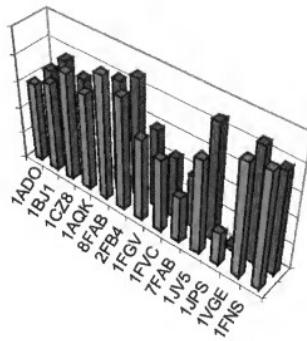


FIG. 4F

REPLACEMENT SHEET

FIG. 4G

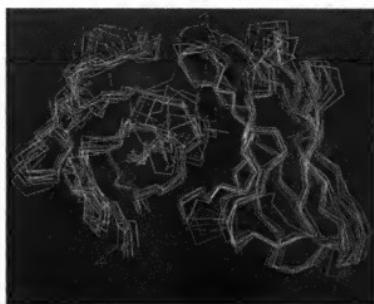


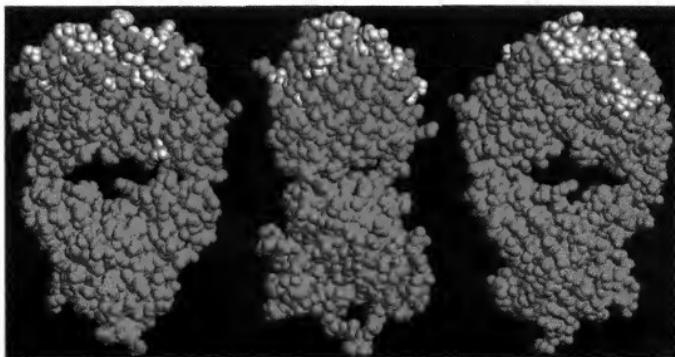
FIG. 4H



FIG. 4I



FIG. 4J



REPLACEMENT SHEET

FIG. 5

A. Fv fragment of heavy chain

20	40	
MNAC13	EVKLVESGGGLVQPGGSLRLSCAASGFTFSTYTM <u>GFTFSTYTM</u> SWARQTPEKRLEWVAYISKG--	
1AD0	<u>EVQLLESGGGLVQPGGSLRLSCATSGFTFTDYYMNWVRQAPGKGLEWLGFIGNKAN</u>	
Hum MNAC13	EVQLLESGGGLVQPGGSLRLSCAAS <u>GFTFSTYTM</u> SWAR <u>QAPGKGLEWVAYISKG</u> --	
60	80	100
MNAC13	GGSTYYPD <u>TVKGRFTISRDNAKNTLYLQMSSLKSEDTALYYCARGAMFGNDFFFPM</u> D	
1AD0	<u>GYTTEYSASVKGRTFTISRDKS KSTLYLQMNTLQAEDSAIYYCTRDR---GLRFYFD</u>	
Hum MNAC13	<u>GGSTYYPD TVKGRFTISRDNSKNTLYLQMNSLRAEDSAVYYCARGAMFGNDFFFPM</u> D	
MNAC13	RWGQGT SVTVSSA	
1AD0	<u>YWGQGT LTVSSA</u>	
Hum MNAC13	<u>RWGQGT LTVSSA</u>	

B. Fv fragment of light chain

20	40	
MNAC13	DIVLTQSPAIMSASLGEEV <u>TLCASSSVSYMHWYQQKSGTSPKLLIYTTSNL</u>	
1AD0	<u>QTVL QSPSSLSVGDRV TCRASSVTVIHWYQQKPGLAPKSLIYATSNL</u>	
Hum MNAC13	DIVLTQSPSSLSASVGDRV <u>TLCASSSVSYMHWYQQKPGQAPKLLIYTTSNL</u>	
60	80	100
MNAC13	ASGVPSRFSGSGSGT FYLT ISSVEADA ADYYCHQWSSYPWT FGGGTKLEIK	
1AD0	ASGVPSRFSGSGSGT DYTF TISSL QPEDIA TYCQHWSSKPPTFGQQGTV KEVK	
Hum MNAC13	<u>ASGVPSRFSGSGSGT DYTL TISSL QPEDVATYYCHQWSSYPWT FGGGTKVEIK</u>	

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FIG. 6

A. Fv fragment of heavy chain

	20	40	
αD11	QVQLKESGPGLVQPSQTLSLTCTVSGFSLTNNNVNVRQATGRGLEWMGGWAG-G		
1JPS	EVQLVESGGGLVQPGGSLRLSCAASGFNIKEYYMHWVRQAPGKGLEWVGLIDPEQG		
Hum αD11	EVQLVESGGGLVQPGGSLRLSCAAS <u>GFSLTNNNVNVRQAPGKGLEWVGGWAG-G</u>		
	60	80	100
αD11	ATDYNSALKSRLITIRDTSKSQVFLKMHSLQSEDATATYYCARDGGYSSSTLYAMD		
1JPS	NTIYDPKFQDRATISADNSKNTAYLQMNSLRAEDTAVYYCARDTAA-----YFD		
Hum αD11	<u>ATDYNSALKSRTFISRDNSKNTAYLQMNSLRAEDTAVYYCARDGGYSSSTLYAMD</u>		
αD11	AWQQGTTVTVSA		
1JPS	YWQQGTLVTVSS		
Hum αD11	<u>AWQQGTLVTVSS</u>		

B. Fv fragment of light chain

	20	40	
αD11	DIQMTQSPASLSASLGETVTIECRASEDIYNALAWYQQPKPGKSPQLLIYNTDTL		
1JPS	DIQMTQSPSSLASAVGDRVITICRASRDIKSYLNWYQQPKPGKAPKVLIYATSL		
Hum αD11	DIQMTQSPSSLASAVGDRVIT <u>ICRASEDIYNALAWYQQPKPGKAPKLLIYNTDTL</u>		
	60	80	100
αD11	HTGVPSRFSGSGBTQYSLKINSLQSEDVASYFCQHYFHYPRTFGGGTKLELK		
1JPS	AEGVPSRFSGSGBTDYTLTISSLQPEDFATYYCLQHGESPWTFGQGTKVEIK		
Hum αD11	<u>HTGVPSRFSGSGBTDYTLTISSLQPEDFATYYFCQHYFHYPRTFGGGT</u> KVEIK		

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FIG. 7

A) MNAC3VII

GAC ATT GTT CTC TCC CAG TCT CGA GCA ATC ATG TCT GCA TCT CTA GGG GAG GAG ATC ACC CTA ACC TGC AGT GCC AGC
TTG AGT GTA AGT TAC ATG CAC TCG TAC CAG CGG AAG TCA CGG ACT TCT CCC AAG CTC TTG ATT TAT ACT ACA TCC AAC
CTG GCT TCT GAA GTC CCT TCT CGC TTC AGT GGC AGT GGG TCT GGG ACC TTT TAT TCT CTC ACA ATC AGT ATG GTG GAG
GCT GAA GAT GCT GCC GAT TAT TGC CAT CGG TGG AGT AGT TAT CCA TGG ACG TTC GGT GEA GGC ACC AAG CTG GAA
ATC AAA

B) MNAC3VIII

GAG GTG AAG CTG GTG GAG TCT GGG GGA GGT TTA GGG CAG CCT GGA GGG TCC CTC AAA CTC TCC TGT GCA GCC TCT GGA
TTC ACT TTC ACT ACC TAT ACC ATG TCT TGG GCT CCT CAG ACA CGA CGA AAG AGG CTG GAG TGG GTC GCA TAC ATT AGT
AAA GGT GGT GGT AGT ACC TAC TAT CCA GAC ACT GTA AAG GGC CGA TTC ACC ATC TCC AGG GAC ATT GCG AAG AAC ACC
CTG TAC CTG CGA ATG AGC AGT CTG AAG TCT GAG GAC ACC GCC TTG TAT TAC TCT GCA AGA GGG GGT ATG TAT GET AAC
GAT TTT TTC TAT CCT ATG GAC TAC TGG GGT GAA ACC TCA GTC ACC GTC TCC TCA

REPLACEMENT SHEET

CIMNAC13 GRAFTED VI

<p>5' D I V L T Q S P S S L S A S V G D R V T I T C S GGC CGG CAC TCC GAC ATT GTT CTC ACC CAG TCT CCA TCC AGC CTG TCT GGT CGG GAC CGG GTC GGG AAC ATC ATG ACC TCA TGA ATA GGT ACC TSC AAC CCA CCT CGG TGG TTC CAC CCT TAT TTT GCA CTC ATC TTA TCT 3' OLIGO 15AS</p>	<p>5' A S S V S Y M H W Y Q K P G K A P K L L I Y T T S N L TGG TAC CAG CAG ANG CCA GGC AAG GCT CCC AAG CTC CTG ATT TAT ACT ACA TCC AAC CTG CCG TCG AGA TCA CAC TCA ATG TAC CTG AGC ATG GTC GTC TMC GGT CGG 3' OLIGO 12AS</p>	<p>5' A S G V P S R F S G S G T D Y T L T I S S L Q P E D F GCT TCT GGA GTC CCT TCT ACC CTC ACA ATC ATG AGT CTG CAG CCT GAA GAT TTC CGA AGA CCT CAG GGA AGA CGG AAG TCG CGG TCA CCC AGA CCC TGG CTA ATA TGG GAG TGT TAG TCA TCA GAC 3' OLIGO 14AS</p>	<p>5' A T Y C H Q W S S Y P W T F G G T K V E I K GCC ACC TAT TAC TGC CAT CGG TGG AGT AGT TAT CCA CCT CGG TGG TTC CAC CCT TAT TTT GCA CTC ATC TTA TCT ACC TCA TGA ATA GGT ACC TSC AAC CCA CCT CGG TGG TTC CAC CCT TAT TTT GCA CTC ATC TTA TCT 3' OLIGO 16AS</p>	<p>5' AGA TTG AAT 3' 5'</p>
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FIG. 7 continued

REPLACEMENT SHEET

D. MNACJ3 GRAFTED VH

5' E V Q L L E S G G G L V Q P G G S L R L S C A A
 ACA GGC GCG CRC TCC GAG GTG CAG CTG GAG TCT GGG GGA GGT TTA GNG CAG CCT GGA GGG TCC CTG CGC CTC TCC TGT
 CCC AGG GAC GCG GAG AGG ACA CGT CGG
 3'

5' S G F T P S T Y T M S W A R Q A P G K G L E W V A Y I S X
 OLIGO H3S
 TGG GCT CGC CAG GCC CCA GGG AMG GGG CTG GAG TGG GTC GCA TAC ATT ATG AA
 AGA CCT AAG TGA AAG TGA TGG ATA TGG TAC TCG ACC CGA GCG GTC CGG GGT CCC
 3'
 OLIGO H2AS

5' G G S T Y Y P D T V K G R F T I S R D N S X N T L Y L Q
 GGT GGT ACT ACC TAC TAT CCA GAC
 CCA TCA TGG ATG ATA GGT CTG TGA CAT TTC CGG GCT AMG TGG TGA AGG TCC CTG TNG AGC TTC TGG GAC ATG GAC GTT
 3'
 OLIGO H4AS

5' M N S L R A E D S A V Y Y C A R G A M P G N D P F P P M D
 OLIGO H5S
 ACA CTC AGT CTG CGG GCT GAG GAC AGC GCC GTC TAT TAC TGT GCA AGA GGG GCT AMG TTT
 ACA CTC TCT CCC CGA TAC AAA CCA TGG CTA AAA AAG AAA GGA TAC CTG
 3'
 OLIGO H6AS

5' R W G Q G T L V T V S
 GCG ACC CCA GTT CCT TGG GAC CAG TGG CAG AGG
 3'
 5'

FIG. 7 continued

REPLACEMENT SHEET

FIG. 7 continued

E) Oligos to synthesize Mac13 VI

Oligo L1S
ACA GGC TGT CAC TCC GAC ATT GTT CTC ACC CAG TGT CCA TCC AGC CAG TGT GTC GCG TCT GTC GCG GAC CGG GTC ACC ATT

Oligo L2S
GCC TGG CTT CTG CTG GTC GAT GTC ACT CAC ACT AGA GCT GGC GCT GCA GTC ATT ATT GGT GAC CGG GTC CCC GAC

Oligo L3S
TGG TAC CAG CAG AAG CCA GGC AAG GCT CCC CTC CTC AAG AAC TCC ATT ATT ACT AGA TCC AAC CTG GTC ATT TCT GAA GTC CCT TCT

Oligo L4S
CAG ACT ACT GAT TGT GAG GGT ATA ATC GGT CCC AGA CCC ACT GCC GCT GAA GCG AGA AGG GAC TCC AGA AGC CAG

Oligo L5S
ACC CTC ACA ATC AGT AGT CTG CAG CCT GAA GAT TWC GCC ACC TAT TAC TGC CAT CAG TGG AGT AGT TAT CCA TSG ACG

Oligo L6S
TAA GTC AGA TCT ATT CTC CTC AGC TTT TAT TTC CAC CTT GGT GCC TCC ACC GAA CGT CCA TGG ATA ACT ACT CCA

F) Oligos to synthesize Mac13 VII

Oligo H1S
ACA GGC GCG CAC TCC GAG GTG CAG CTC CTC GAG TGT GGG GGA GGT TTA GTC CAG CCT GGA GGG TCC CTC CGC CTC TCC TCT

Oligo H2AS
CCC TGG CTC GCG AGC CCA GCT ATT ATT GGT ACT GAA AGT GAA TCC AGA GCG TGC ACA GGA GAG GCG CGG CGA CGC

Oligo H3S
TGG GCT CGC CGG GCC CCA GGG AAG GGG CTC GAG TGG GTC GCA TAC ATT ATT AAA GGT GGT AGT ACC TAC TAT CCA GAC

Oligo H4AS
TTG CAG CAA CAG GCT GGT CTT CCA GTT GTC CCT GGA GAT GGT GIA TCG GCC CCT TAC AGT GTC TGG ATA GTA GGT ACT ACC

Oligo H5S
AAG AAC ACC CTC TAC CTC CTC CTC ATT AAC AGT CTC CGG GTC AGC GGC GTC TAT TAC TGT GCA AGA GGG GGT ATG TT

Oligo H6S
GGA GAC GGT GAC CAG GGT TCC TTG ACC CCA GCG GTC CAT AGG AAA GAA AAA ATC GTT ACC CCC CCT TGT ACA

REPLACEMENT SHEET

FIG. 8

A) WII WL

GAC ATC CAG ATG ACC CAG TCT CCA GCT TCC CTG TGT GCA TCT CTG GEA GAA ACT GTC ACC ATC GAA TGT CGA GCA AGT GAG GAC GAT
TAT AAT GCT TTA GCA TGG TAT CGG CAG AAG CCA GGG AAA TCT CCT CGG CTC CTG ATC TAT AAT ACA GAT ACC TTG GAT ACT EGG CTC
CCA TCA CGA TTC AGT GGC AGT GGA TCT GGT ACA CHA TAT TCT CTC AGC ATA AAC AGC CTG CHA TCT GAA GAT GTC GCA AGT TAT TCC
TGT CAG CAC TAT TTC CAT TAT CCT CGG AGC TTC GGT GGA GGG ACC AGC CTG GAG ATC AAA

B) WII WIH

CAG GTG CGG CTG CTG GAA TCA GGA CCT GTP CTG CTG CGG CCC TCA CAG ACC CTG TCC CTC ACC TGC ACT GTC TCT GGG TTC TCA CTA
ACC AAC AAC AAT GTG AAC TCG CTT CGA CAG GCT ACA GGA AGA GGT CGT CAG TGG AGT GEA GEA GCA GTC TGG GCT GGT GGA GCC ACA GAT
TAC AAT TGA GCT CTC AAA TCC CGA CTG CGS ACC ATC ACT AGG GAC ACC TCC AAG AGC CHA GTC TTA AAA ATG GAC ATG CTG CA
TCT GAA GAC ACA GGC ACT TAC TAC TGT GCC AGA GAC GGG GGC TAT AGC TCT ACC CTC TAT GTC AGT GAT GCC TGG GGT CTA GGA
ACT TCG GTC ACC GTC TCC TCA

REPLACEMENT SHEET

CdII GRAFTED VI

D I Q M T Q S P S S L S A S V G D R V T I T C R
 5' AGA GGC GTG CAC TCC GAC ATC CAG ACC TAT CGT TCA TCC CCA TCG TCT GCA TGT GTC GCG CCT CGS CGG TAG TAG TGT ACA GGT
 3'
 OLIGO L15

A S E D I Y N A L A W Y Q Q P G K A P K L L I Y N T D T
 5' CGT TCA CTC CTG TAA ATA TTA CGA ATT CGT ACC ATA GTC GTC TTC GET
 3'
 OLIGO L2AS

L H T G V P S R P S G S G T D Y T L T I S S L Q P E D
 5' TTG CAT ACA GGG GTC CCA.
 AAC GTA TGT CCC CAG GGT AGT GCT AAG TCA CCG TGA CCT AGA CCA TGT CTG ATA TGA GAG TGC TAT TCG TCG GAC
 3'
 OLIGO L4AS

F A T Y F C Q H Y F H Y P R T F G Q G T K V E I K
 5' TTC GCA ACT TAT TTC TGT CAG CAC TAT TTC CAT TAT CCT CGG
 3'
 AGA TGT ATA AGA GCA GTC AAG CCA GGT CCC TGG TTC GAC CTC TAG TTT GCA CTC ATC TTA
 OLIGO L5AS

AGA TGT AAC
 3',
 5'

FIG. 8 continued

REPLACEMENT SHEET

D) dJIL GR4 FFD VH

5' E V Q L V E S G G G L V Q P G G S L R I S C A A 3'
AGA GGC GCG CAC TCC GAG CTG CAG CGT GAA TCA GGA GTC GGT CAG CGT AGC TCG AGC CGA CGG 5'
CCC AGG GAC GCG GAG TCG AGC CGA CGG CGG 3'

S G P S L T N N V N W V R Q A P G K G L E W V G G V W A 3'
OLIGO H3S
AAC TGG GTT CGA CAG GCT CCA CGA AAA GGT CTG GAG TGG GNG GGA GGA GTC TGG GCT
AGA CCG AAG AGT GAT TGG TGG TGG TTA CAC TAC ACC GCA GCT GTC CGA GGT CCT
OLIGO H2AS 5'

G G A T D Y N S A L K S R F T I S R D N S K N T A Y L Q N 3'
GGA GCC ACA GAT TAC AAT TCA
CCT CGG TGT CTA ATG TTA AGT CGA GAG TTT AGG GCT AAG TGG TAG TCA GCG CTTG AGG TGG TGT TGT CGA ATG AAT GTT TAC
OLIGO H4AS 5'

N S L R A E D T A V Y C A R D G G Y S S S T L Y A M D A 3'
OLIGO 5S
AAC AGT CTT CGC GCT GAA GAC ACA GCC GTC TAC TAC TGT GCT GCA AGA GAC GGG GGC TAT AGC
CGG TCT CGG CCC ATA TCG TCG AGA TGG GAG ATA CGA TAC CTA CGG
OLIGO H2AS 5'

W G Q G T L V T V S S
ACC CCA GTT CCT TGA GAC CGC TGG CAG AGG AGT 5'

FIG. 8 continued

REPLACEMENT SHEET

FIG. 8 continued

E) OLIGOs TO SYNTHESIZE adILV

OLIGO L1S
AGA GGC GTC CAC TCC GAC ATC CAG ATG ACC GAG TCT CCA TCT TCC CTC CGT TGT GGA GAC CGC GTC ACC ATC

OLIGO L2AS
TGG CTT CTG CTG ATA CCA TGC TAA AGC ATN ATA AAT GTC CTC ACT TCG TCG ACA TGT GAT GGT GAC GCG GTC TCC CAC

OLIGO L3S
GCA TGG TAT CAG CAG AAG CCA GGG AAA GGT CCT AAG CTC CTC ATC TAT AAT AGA GAT ACC TTG CAT AGA GGG GTC CCA

OLIGO L4AS
CAG GCT GCT TAT CTT GAG AGT ATA GTC TCT ACC AGA TCC ACT GCC ACT GAA TCG TGA TGG GAC CCC TGT ATG CAA GGT

OLIGO L5S
ACT CTC AGC ATA AGC AGC CTC GAA CCT GAA GAT TTC GCA ACT TAT TTC TGT CAG CAC TAT TTC CAT TAT CCT CGG

OLIGO L6AS
CAA TCT AGA ATT CTA CTC ACG TTT GAT CTC CAC CTT GFT CCC TTG ACC GAA CST CCG AGG ATA ATG GAA ATA GTG

F) OLIGOs TO SYNTHESIZE adILVH

OLIGO E1S
AGA GGC GCG CAC TCC GAG GTG CAG CTG GTG GAA TCA GGA GGT GGT CTC GAG CCC GGA GGG TCC CTC CTC AGC TGC

OLIGO H2AS
TCC TGG AGC CTC AGC CCA GGT CAC ATT GTT GFT GFT TGT TGA GAA GGC AGC GCA GCT GAG GCG CAG GGA CGC

OLIGO H3S
AAC TGG GTC CTA CAG GCT CCA GGA AAA GGT CTG GAG TGG GTG GGA GGA GTC TGG GCT GCT GGT GGA GGC AGC GCA GAT TAC ATT TCA

OLIGO H4AS
CAT TTG TAA GTA AGC TCT GTT CTT GGA GGT GTC GCG ACT GAT GGT GAA TGG TTT GAG AGC TGA ATT GTA ATC TGT GGC TCC

OLIGO H5S
AAG AAC AGA GCT TAC TTA CAA ATG AAC ACT CTG CGC GCT GAA GAC ACA GCC GTT TAC TAC TGT GGC AGA GAC GGG GGC TAT AGC

OLIGO H6AS
TGA GGA GAC GGT GAC CAG AGT TCC TTG ACC CCA GGC ATC CTT AGC ATA GAG GGT AGA GCT GCA ATA GTC CCC GTC TCT GGC

REPLACEMENT SHEET

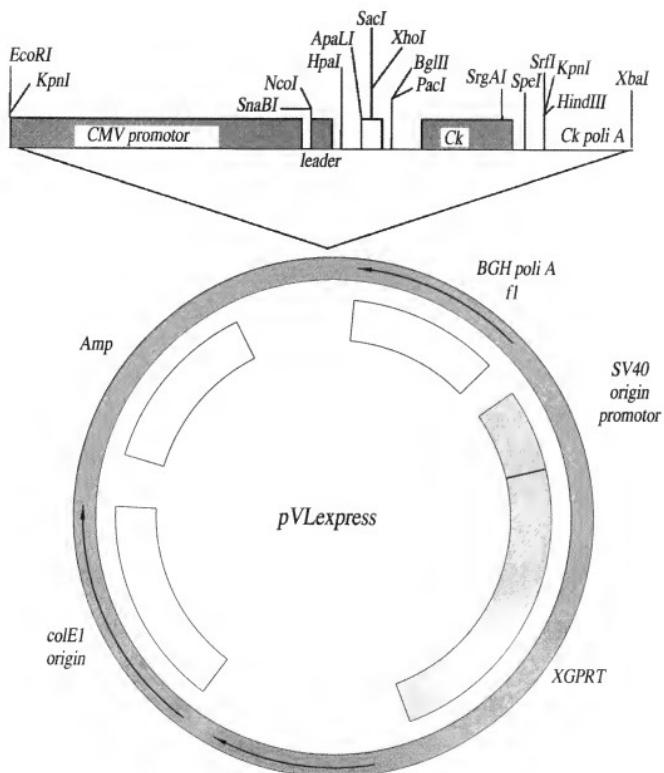


FIG. 9A

REPLACEMENT SHEET

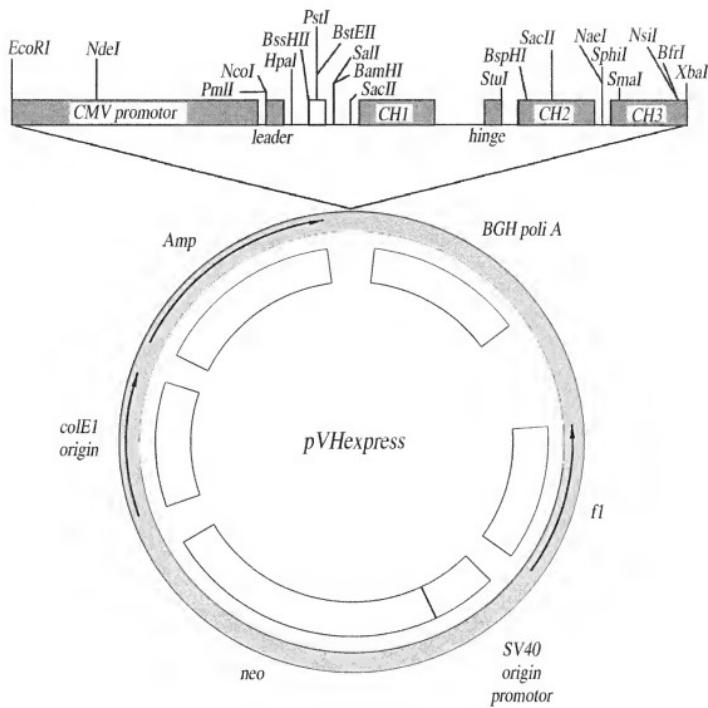


FIG. 9B

REPLACEMENT SHEET

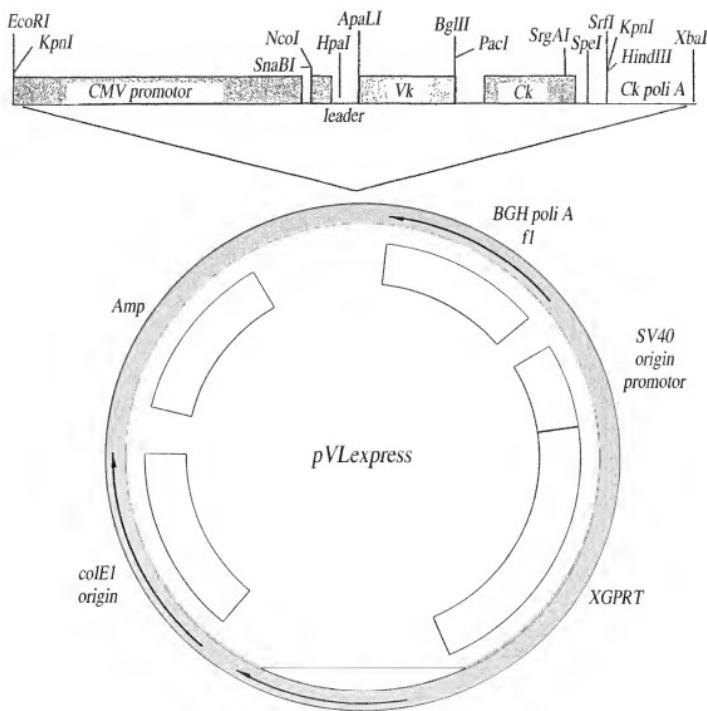


FIG. 9C

REPLACEMENT SHEET

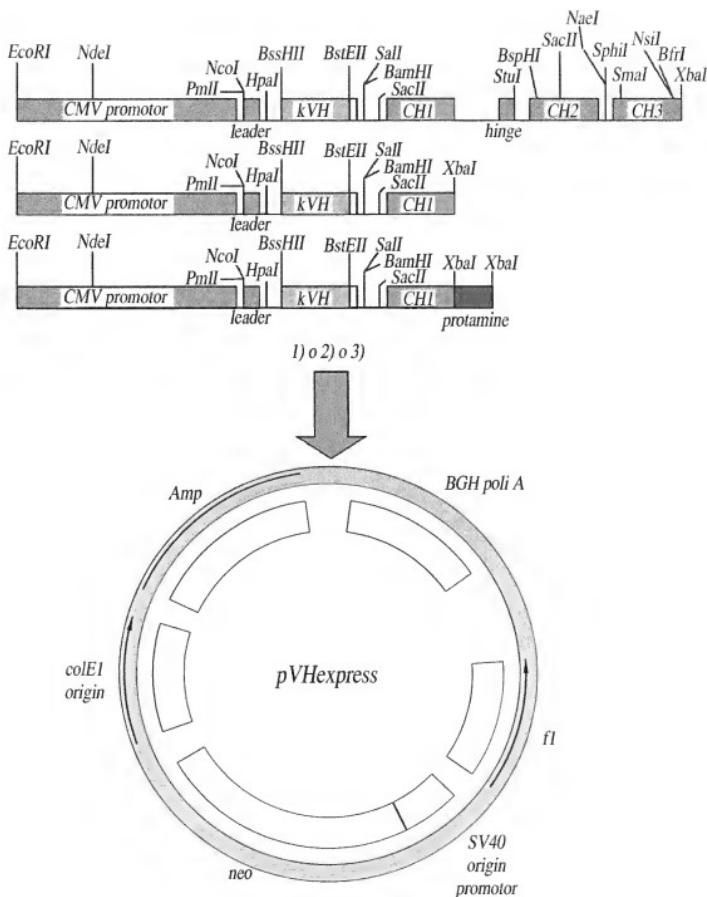


FIG. 9D

REPLACEMENT SHEET

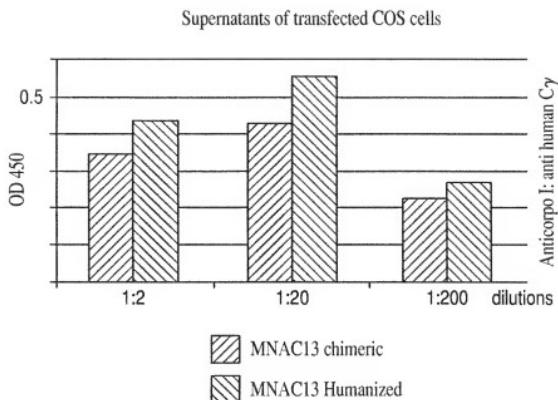


FIG. 10A

REPLACEMENT SHEET

FIG. 10B G protein sepharose purified supernatants of transfected COS cells

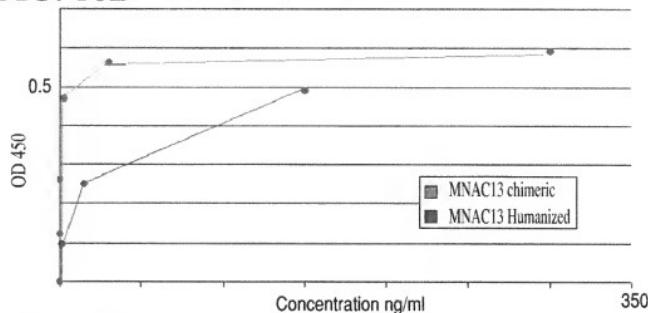


FIG. 10C G protein sepharose purified supernatants of transfected COS cells

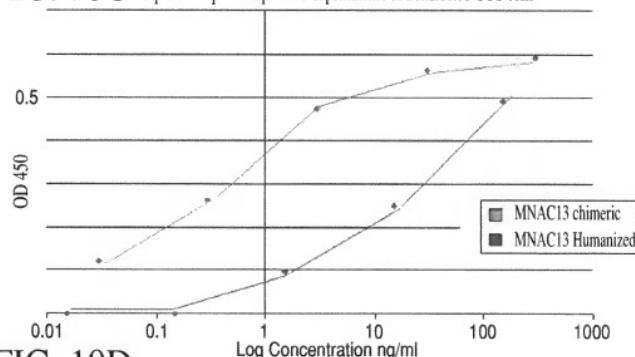
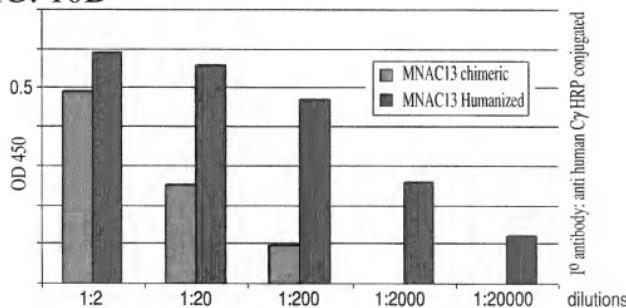


FIG. 10D



REPLACEMENT SHEET

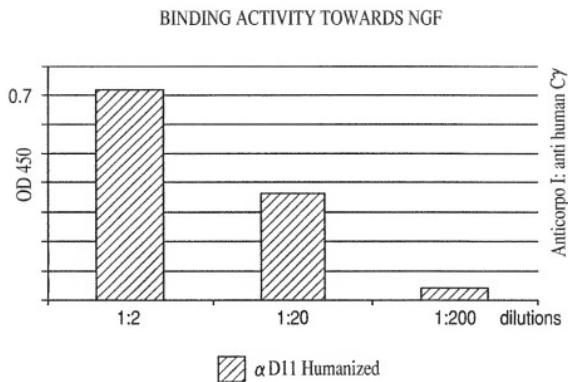


FIG. 11